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ABSTRACT

A limited survey was made of course offerings in the area of decision science in educational administration programs. The data indicate that most of the surveyed programs offer at least a component of a course in decision science, and that these courses are relatively new -- most having been initially offered in the past three years. (Parts of page five may reproduce poorly.) (Author)

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TEACHING THE DECISION SCIENCES IN EDUCATIONAL ADMINISTRATION

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INTRODUCTION

The major function of management is decision-making, and the most prized attribute of an administrator is good judgement. Since the second world war, systems studies and the tools of operations research have contributed greatly to the good judgement of decision-makers.

The largest industry in this country--education--certainly has its fair share of decision-makers, and the increasing public demand for accountability in school administration requires administrators with poor judgement to have their credentials up-to-date. The decision-science tools that come from operations research would appear, therefore, to be an important component of a training program in educational administration.

Over 200 colleges and universities in the United States offer degree programs in educational administration, and according to one source [1], 88 of these offer a program that leads to the doctorate in educational administration. This is a preliminary report on a study of the decision-science courses that are offered in those programs in educational administration.

THE STUDY

In the Spring of 1973, a review was made of the graduate school catalogs of 78 of the 88 universities that are listed in the 14th edition of The College Blue Book [1] as offering

the doctorate in educational administration. The purpose of the search was to determine how many of these universities offer a course in decision science for educational administrators. Ten of the 88 catalogs were not available for review.

From a survey of the deans of the schools of education or the chairmen of the departments of education, it was determined that three of the 88 universities did not offer the doctorate in educational administration. One of these three was among those whose catalog was not available.

Therefore, of the 85 universities, 76 catalogs were available for review, and 22 of them (30 percent) contained a course listing that appeared to contain at least a component which could be called decision science.

A questionnaire was developed and sent to the instructors of each of the courses listed in the catalogs. It was also sent to the deans or chairmen of departments of educational administration of the universities for which no appropriate course was known--in case a new course was developed or a course was missed in the review of the catalogs.

The instrument was designed to answer the following questions: 1) the number of times per year the course was taught; 2) the average enrollment; 3) when the course was first taught; 4) the percentage of doctoral candidates in educational administration that take the course; and 5) the major topics

covered. In addition, a copy of the syllabus and course materials was requested.

Two copies of the one-page instrument along with a stamped and addressed envelope were sent to each University in July of 1973, with a follow-up mailing conducted seven weeks later. Of the 85 universities surveyed, 58 responded (68 percent).

LIMITATIONS

Due to the relatively low rate of response and the discovery that the listing in The College Blue Book was not complete, inferences drawn to the population of universities offering the doctorate in educational administration are tenuous. This study, then, is descriptive of only those universities that responded from the population of those listed in the referenced section of the source document.

RESULTS OF THE STUDY

Of the 58 universities that qualified and responded, 53 courses were considered as courses that had "at least a component of 'decision science' in it." These were considered on the basis of catalog descriptions and suggestions from deans. Eleven of these courses were disregarded since they were evaluated by the researcher as not having a significant

component of decision science. That left 42 courses in 37 different universities.[1]

That is, 64 percent of the responding universities taught at least one graduate-level course that had at least a component of decision science. These courses were varied, and Table 1 shows the emphasis of these courses, as determined by the researcher, in addition to certain descriptive data provided by the instructors.

Table 1 about here

When asked which major topics were covered in the courses, several decision-science areas were mentioned. Half of the instructors claimed coverage of a path analysis technique. Almost as many cited planning programming budgeting system (PPBS). Management information systems (MIS) and cost effectiveness techniques were also frequently mentioned. Table 2 presents a summary of the responses to this question.

Table 2 about here

SUMMARY

A limited survey of course offerings in the area of decision science in educational administration programs was done. The data indicate that most of the surveyed programs in

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[1] Three universities reported planning a course for 1974. Limited information revealed that nine other courses existed at seven other universities, but the lack of response from the instructors prevented their inclusion with these data.

educational administration offer at least a component of a course in decision science and that these courses are relatively new--most having been initially offered in the past three years.

It is suggested that a more complete and comprehensive study be conducted to more accurately capture the scope and state-of-the-art of the decision sciences in doctoral programs in educational administration.

REFERENCE

[1] The College Blue Book, Vol. I, 14th ed. (New York, CCM Information Corporation, 1972), pp. 455-456.

Table 1
Descriptive Data on Courses, by Course Emphasis

Course Emphasis	No. of Courses	Times Offered Per Year		Average Enrollment		Year 1st Taught		% of Doctoral Majors Enrolled	
		Mean	Range	Mean	Range	Mode	Range	Mean	Range
Systems Analysis	13	1.6	1-4	16	6-30	1970	1965-73	55[1]	15-95[1]
General Educ. Admin.	7	1.7	1-3	16	10-25	1971	1966-73	55[2]	5-100[2]
Educational Finance	7	1.7	1-3	21	12-50	1968[2]	1965-71[2]	60	8-100
Educ. Decision-Making	5	1.2	1-2	17	10-30	*	1968-73	23	5-50
Educational Planning	5	2.0	1-3	16	10-25	1973[1]	1968-73[1]	28[3]	10-45[3]
Computers	4	1.8	1-2	18	12-25	*	1965-68	83[1]	75-100[1]
Mathematical Modeling	1	1.0	1	20	20	1969	1969	20	20
Total	42	1.6	1-4	17	6-50	1970	1965-73	51	5-100

[1] One value not reported

[2] Two values not reported

[3] Three values not reported

* No Mode exists

Table 2

Major Topics in Decision-Science Reported for the 42 Courses

Topic Area	Courses Including Topic	
	Number	%
Path Analysis	21	50
Planning Programming Budget System	17	40
Management Information Systems	14	33
Cost Effectiveness	13	30
Linear Programming	9	21
Simulation	6	14
Futures	4	10
Management by Objectives	4	10